

MODELS: Stinson SR-10B, -10C (Army UC-81K), -10G (Army UC-81A), -10G3, -10H, -10J, -10J3

T.C. NUMBER: 678

**I - SPECIFICATIONS PERTINENT TO ALL MODELS**

Propeller	(See item 102)
Airspeed limits	Level flight or climb - 155 mph True Ind. Glide or dive - 209 mph True Ind. Flaps extended - 121 mph True Ind.
No. passengers	4 (one front (+13.5), three rear (+53.5))
Baggage	150 lbs. (50 lbs. under rear seat (+54) and 100 lbs. aft of rear seat (+85)) (See NOTE 2)
Certification basis	Type Certificate No. 678
Serial numbers	5801 and up manufactured prior to 2/28-41 and all AAF numbers eligible. Approval expired as of 2/28/41. (See NOTE 4)

**EQUIPMENT:**

(Datum is wing leading edge (outboard of curved portion)) (\* Means net increase)

	5800 SERIES		5900 SERIES
	SR-10B, C, G, G-3, H, J, J-3		SR-10B, C, G-3, H, J, J-3      SR-10G
Class I:			
A. Landplane:			
101. Engine cowl	50 lbs.	43 lbs.	43 lbs.
102. Propeller			
(a) Lycoming-Smith P-220 with Curtiss 32080 blades	117 lbs. (-64)	(Item 302b)	(Item 302b)
(b) Hamilton Standard 2B20 hub with 6135A-6 or 6135A- 7 blades. Diameter 8'6-1/8" maximum, 8'3-7/8" minimum.	(Item 302a)	104 lbs. (-65)	104 lbs. (-65)
103. Starter (Eclipse E-80)	20 lbs.	18 lbs.	18 lbs.
104. Battery and box			
(a) Exide 6TS-7-1	--	30 lbs. (+33)	--
(b) Exide 6TS-13-1	38 lbs. (+94)	(Item 322)	40 lbs. (+33)
105. 7.50-10 wheels with			

8.50-10 4-ply tires (wheels must be placarded for these tires) (See Sections V and VII re tires)	76 lbs. (+4)	76 lbs. (+4)	76 lbs. (+4)
106. 10 inch smooth contour tail wheel and tire	21 lbs.	21 lbs.	21 lbs.
107. Cabin heater	8 lbs.	6 lbs.	6 lbs.
108. Shielding - Packard B.G. plugs	9 lbs.	9 lbs.	9 lbs.
109. Carburetor air heater			
110. (Now Class III equipment)			
111. Generator - 15 amp. (Eclipse AL-1 or G)	(Item 301b)	(Item 301b)	25 lbs. (-31)
B. Seaplane (SR-10C, SR-10G-3 and SR-10H only): (Items 101 thru 104, 107 thru 109, 111 PLUS)			
151. Edo 39-4000 float installation with water rudder and auxiliary fin	306 lbs.* (+25)	313 lbs.* (+29)	--
Class II:			
200. Miscellaneous items as noted in approved weight and balance report			
201. Battery and box			
(a) Exide 6XT-13-1	66 lbs.	74 lbs. (+33)	74 lbs. (+33)
(b) Exide 6TX-19-1	80 lbs.	80 lbs. (+33)	80 lbs. (+33)
202. Fuel tanks - two 25 gallon main (wing)	--	28 lbs. each (+34)	28 lbs. each (+34)
203. Adams mail pick-up and delivery device (Kirkham Eng. Corp.) (See NOTE 3)			
(a) Pick-up unit (replaces rear hammock seat 22 lbs. (+59) and rear seat supports 8 lbs. (+163))	54 lbs. (+54)	54 lbs. (+54)	54 lbs. (+54)
(b) Delivery unit	5 lbs. (+95)	5 lbs. (+95)	5 lbs. (+95)
(c) Cable and hook (pick-up)	20 lbs. (+80)	20 lbs. (+80)	20 lbs. (+80)
(d) Rope and basket (delivery)	14 lbs. (+95)	14 lbs. (+95)	14 lbs. (+95)
(e) Forward mail com- partment (200 lb. capacity) (replaces copilot chair 24 lbs. (+12) and controls 4 lbs. (-13))	5 lbs. (+6)	5 lbs. (+6)	5 lbs. (+6)
(f) Center mail com- partment (150 lb. capacity)	5 lbs. (+27)	5 lbs. (+27)	5 lbs. (+27)
(g) Rear mail compart- ment (150 lb. capacity)	8 lbs. (+115)	8 lbs. (+115)	8 lbs. (+115)
(h) Well in floor	9 lbs. (+85)	9 lbs. (+85)	9 lbs. (+85)
(i) Long cabin type trim	2 lbs. (+85)	2 lbs. (+85)	2 lbs. (+85)
(j) Structural modifi- cations per Stinson Drawing Z-3325	25 lbs. (+80)	25 lbs. (+80)	25 lbs. (+80)
(k) Metal skin on belly	15 lbs. (+123)	15 lbs. (+123)	15 lbs. (+123)
(l) Folding seat	6 lbs. (+41)	6 lbs. (+41)	6 lbs. (+41)
204. (a) Generator - 25 amp. (Eclipse D)	(Item 301a)	30 lbs. (-31)	(Item 301a)
(b) Quick detachable generator control box	(Item 301c)	2 lbs. (-22)	(Item 301c)
205. Vacuum pump and accessories	(Item 305)	10 lbs. (-21)	(Item 305)
206. Extra set of controls (rear)	--	55 lbs.* (+36)	--
207. All American Type			

AAS-3 mail pick-up and delivery device (All American Aviation, Inc.) installed on model SR-10C only (See NOTE 6)				
(a) Pick-up unit	39 lbs. (+47)	39 lbs. (+47)	--	
(b) Hydraulic system complete (All American Aviation, Inc. Drawing S-1)	20 lbs. (-14)	20 lbs. (-14)	--	
(c) Pole knee	8 lbs. (+38)	8 lbs. (+38)	--	
(d) Pole yoke	11 lbs. (+167)	11 lbs. (+167)	--	
(e) Pole	7 lbs. (+86)	7 lbs. (+86)	--	
(f) Pick-up rope and hook	3 lbs. (+40)	3 lbs. (+40)	--	
(g) Structural modifications per Stinson Drawings Z-2838, Revision D, Z-4032, Revision B and supplementary drawings (including metal belly cowl, special fittings, reinforced floor, revised cabin structure, special hatch and less rear seat)	35 lbs. (+80)	35 lbs. (+80)	--	
(h) Swiveling co-pilot's chair	4 lbs.* (+13)	4 lbs.* (+13)	--	
208. All American Type AAS-4 mail pick-up and delivery device (All American Aviation, Inc.) installed on Model SR-10C only (See NOTE 8)				
(a) Pick-up unit	38 lbs. (+55)	38 lbs. (+55)	--	
(b) Electric control switch	1 lb. (+50)	1 lb. (+50)	--	
(c) Electric drive unit	11 lbs. (+58)	11 lbs. (+58)	--	
(d) Arm yoke and lever	14 lbs. (+71)	14 lbs. (+71)	--	
(e) Arm (including track and hook retainer)	10 lbs. (+140)	10 lbs. (+140)	--	
(f) Pick-up line and hook	4 lbs. (+55)	4 lbs. (+55)	--	
(g) Release unit	3 lbs. (+64)	3 lbs. (+64)	--	
(h) Auxiliary seat	6 lbs. (+47)	6 lbs. (+47)	--	
(i) Well to floor	7 lbs. (+79)	7 lbs. (+79)	--	
(j) Metal skin on belly	20 lbs. (+135)	20 lbs. (+135)	--	
(k) Baggage shelf (two) (15 lb. capacity each)	5 lbs. (+90)	5 lbs. (+90)	--	
(l) Structural modifications per Stinson Drawing Z-5081 and supplementary drawings)	X	X	--	
209. Alternate pneumatic operated contact arm yoke installation for use with item 207 or 208; as described in All American Aviation, Inc. Report AM-107-S (Model SR-10C only).				
(a) Pick-up arm and yoke	17 lbs. (+13)	17 lbs. (+13)	--	
(b) Vacuum cylinder, brackets and rod	16 lbs. (-23)	16 lbs. (-23)	--	
Class III:				
110. Wheel streamlines	24 lbs. (+3)	21 lbs. (+3)	21 lbs. (+3)	
301. Generators				
(a) 25 amp. (Eclipse D)	30 lbs. (-40)	(Item 204a)	30 lbs. (-31)	
(b) 15 amp. (Eclipse				

	AL-1-G)	25 lbs. (-40)	25 lbs. (-31)	(Item 111)
	(c) Quick detachable type control box	2 lbs. (-22)	(Item 204b)	2 lbs. (-22)
302.	Propellers			
	(a) Hamilton Standard 2B20 hub with 6135A-6 or 6135A-7 blades. Diameter 8'6-1/8" maximum, 8'3-7/8" minimum.	104 lbs. (-63)	(Item 102b)	(Item 102b)
	(b) Lycoming-Smith P220 with Curtiss 320S0 blades	(Item 102a)	117 lbs. (-64)	117 lbs. (-64)
	(c) Pitch change accessories (Lycoming-Smith)	6 lbs. (-59)	--	--
	(d) Constant speed accessories (Hamilton Standard)	--	9 lbs. (-36)	9 lbs. (-36)
	(e) Lycoming-Smith P220 with Lycoming S0200806 blades	111 lbs.	111 lbs.	111 lbs.
	(f) Lycoming-Smith P-220 with Lycoming S0220806 blades	111 lbs.	111 lbs.	111 lbs.
303.	Fuel analyzer - Cambridge	7 lbs. (-14)	7 lbs. (-14)	7 lbs. (-14)
304.	Lights			
	(a) Landing (Grimes ST-1000)	12 lbs. (+13)	--	--
	(b) Landing (Grimes ST-250)	9 lbs. (+16)	9 lbs. (+16)	9 lbs. (+16)
	(c) Fog	3 lbs. (+2)	3 lbs. (+2)	3 lbs. (+2)
	(d) Moonbeam	1 lb. (+10)	1 lb. (+10)	1 lb. (+10)
305.	Vacuum pump and accessories	8 lbs. (-25)	(Item 205)	10 lbs. (-21)
306.	(a) Flares (three 1-1/2 minute)	14 lbs. (+116)	15 lbs. (+116)	15 lbs. (+116)
	(b) Flare wiring (three flares)	2 lbs. (+33)	3 lbs. (+33)	3 lbs. (+33)
	(c) Flares (four 1-1/2 minute)	--	--	20 lbs. (+116)
	(d) Flare wiring (four flares)	--	--	4 lbs. (+33)
307.	Two pilot parachute chairs	30 lbs.* (+17)	24 lbs.* (+17)	24 lbs.* (+17)
308.	Two rear seat parachutes	40 lbs. (+54)	40 lbs. (+57)	40 lbs. (+57)
309.	(a) Special paint	15 lbs. (+48)	15 lbs. (+48)	15 lbs. (+48)
	(b) Special polish (14-16 coats)	10 lbs. (+36)	10 lbs. (+36)	--
	(c) Special polish (10-12 coats)	7 lbs. (+36)	7 lbs. (+36)	--
310.	Radio equipment			
	(a) Miscellaneous (maximum)	60 lbs. between (+16.3) & (+54)	66 lbs. between (+16.3) & (+43)	66 lbs. between (+16.3) & (+43)
	(b) Miscellaneous (maximum in addition to (a))	37 lbs. between (+16.3) & (+54)	37 lbs. between (+16.3) & (+45.6)	37 lbs. between (+16.3) and (+45.6)
	(c) Radio equipment box	7 lbs. (+54)	9 lbs. (+54)	9 lbs. (+54)
	(d) Antenna - tee type	2 lbs. (+59)	2 lbs. (+125)	2 lbs. (+125)
	(e) Antenna - vee type	4 lbs. (+91)	4 lbs. (+91)	4 lbs. (+91)
	(f) Antenna - maximum reel allowance	9 lbs. between (+15) & (+115)	9 lbs. between (+15) & (+115)	9 lbs. between (+15) & (+115)
	(g) Antenna trailing	3 lbs. (+219)	3 lbs. (+219)	3 lbs. (+219)
311.	Two point thermo-couples	3 lbs. (-11)	2 lbs. (-25)	2 lbs. (-25)
312.	Double intensifier tubes	5 lbs.* (-42)	--	8 lbs.* (-42)
313.	(a) Camera door	6 lbs.* (+33)	--	--
	(b) L.H. cabin door and step	14 lbs. (+30)	--	--
	(c) Releasable door	1 lb.* (+15)	1 lb. (+15)	1 lb. (+15)
	(d) Multi-purpose door (Drawing F-3980)	X	X	X
314.	Heated pitot tube	1 lb. (-8)	1 lb. (-8)	1 lb. (-8)
315.	Corrosive proofing			
	(a) Salt water	25 lbs. (+50)	--	25 lbs. (+50)
	(b) Fresh water	15 lbs. (+15)	--	15 lbs. (+50)
316.	Puncture proof tubes or inner liners	6 lbs. (+4)	6 lbs. (+4)	6 lbs. (+4)

317. Fire extinguisher (Lux No. 5)	8 lbs.* (-25)	--	20 lbs. (+1)
318. Thermo-pete (built-in)	2 lbs. (-34)	--	--
319. Special instruments			
(a)	37 lbs. (-16)	20 lbs. (-16)	15 lbs. (-16)
(b)	--	2 lbs. (-12)	2 lbs. (-12)
320. Fuel tanks - one or two auxiliary 24 gallon (wing L.E.)	22.5 lbs. each (+17)	22.5 lbs. each (+17)	23 lbs. (+17) (one only)
321. Oil tanks			
(a) 6-1/2 gallon	2 lbs.* (-34)	2 lbs.* (-34)	--
(b) 7-3/4 gallon or 8 gallon	2 lbs.* (-34)	--	2 lbs.* (-34)
322. Battery and box (Exide 6TS-13-1)	(Item 104b)	40 lbs. (+33)	(Item 104b)
323. 8.50-10 6-ply tires	8 lbs.* (+4)	8 lbs.* (+4)	--
324. Lycoming R-680-E3A engine (Models SR-10J and -10J3 only)	10 lbs.*	10 lbs.*	--

NOTE 1. Eligible for export as follows, subject to inspection for equipment specified in Chapter XII of Manual of Procedures:

- (a) Canada
  - Landplane - eligible.
  - Skiplane - not eligible. However, structure complies with Canadian requirements for ski installation with maximum ski height 10-1/2 inches and maximum tread 113 inches.
  - Seaplane - (SR-10C, SR-10G3 and SR-10H only).
- (b) All other countries except Australia and New Zealand.

NOTE 2. Rear baggage must be limited to 50 lbs. when three passengers are carried on rear seat and compartment must be so placarded, unless substantiated by weight and balance data.

NOTE 3. The following speed and weight limitations must be observed during pick-up and delivery when item 203 is installed.

- (a) Maximum airspeed during pick-up or delivery 100 mph.
- (b) Maximum pick-up load 50 lbs.
- (c) Maximum delivery load 84 lbs.

NOTE 4. Serial numbers 5901 and up same as 5800 series except vertical tail surface, battery installation, fuel system, exhaust collector ring, engine cowl, control wheel, and pilot's chair.

NOTE 5. Model SR-10G, serial numbers 5943 and up eligible at 4000 lbs. with 8.50-10, 6-ply tires, item 323, required equipment. Serial numbers 5901 to 5942, inclusive, eligible as follows:

Maximum weight	4150 lbs.
Airspeed limits	Level flight or climb - 165 mph True Ind.
	Glide or dive - 220 mph True Ind.
	Flaps extended - 121 mph True Ind.

(8.50-10 6-ply tires, item 323, required equipment.)

NOTE 6. The following speed and weight limitations must be observed during pick-up and delivery when item 207 is installed:

- (a) Maximum airspeed during pick-up or delivery 100 mph.
- (b) Maximum pick-up load 50 lbs.
- (c) Maximum delivery load 50 lbs.

NOTE 7. Maximum weight may be increased to 4150 lbs. for Model SR-10C when Item 323 is installed.

NOTE 8. The following speed and weight limitations should be observed during pick-up and delivery when Item 208 is installed.

<u>Maximum Speed</u>	<u>Maximum Load</u>
150	60
140	70
130	80
120	90

## II - MODEL SR-10B, DESIGNATION 5 PCLM

Engine	Lycoming R-680-D6
Engine limits	Maximum, except take-off
	-- in.Hg., 2100 rpm (225 hp)
	Take-off (one minute)

Fuel capacity	-- in.Hg., 2300 rpm (245 hp)
Oil capacity	76 gallons (two 38 gallon tanks in wings) (+34)
Maximum weight	5 gallons (-34)
C.G. limits	5900 lbs.
	5800 series (+16.3) and (+27.7)
	5900 series (+16.3) and (+26.7)

### III - MODEL SR-10C (UC-81F), DESIGNATION 5 PCL-SM

(Same as Model SR-10B except engine installation)

Engine	Lycoming R-680-D5
Engine limits	Maximum, except take-off
	-- in.Hg., 2100 rpm (245 hp)
	Take-off (one minute)
	-- in.Hg., 2300 rpm (260 hp)
Fuel capacity	76 gallons (two 38 gallon tanks in wings) (+34)
Oil capacity	5 gallons (-34)
Maximum weight	Landplane 3900 lbs. (See NOTE 7)
	Seaplane 4210 lbs.
C.G. limits	Landplane :
	5800 series (+16.3) and (+27.7)
	5900 series (+16.3) and (+26.7)
	Seaplane:
	5800 series (+17.0) and (+27.6)
	5900 series (+17.0) and (+26.6)

### IV - MODEL SR-10G (UC-81A), DESIGNATION 5 PCLM

(Same as Model SR-10D, T.C. 679, except engine installation)

Engine	Lycoming R-680-E1
Engine limits	Maximum, except take-off
	-- in.Hg., 2200 rpm (275 hp)
	Take-off (one minute)
	-- in.Hg., 2300 rpm (290 hp)
Fuel capacity	100 gallons (two 38 gallon tanks in wings (+34)
	and one 24 gallon tank in wing L.E. (+17))
Oil capacity	6-1/2 gallons (-34)
Maximum weight	3900 lbs. (See NOTE 5)
C.G. limits	5800 series (+16.3) and (+27.7)
	5900 series (+16.3) and (+26.7)

### V - MODEL SR-10G3, DESIGNATION 5 PCLM

(Same as Model SR-10B except engine installation and standard weight, 8.50-10 6-ply tires, item 323, required equipment.)

Engine	Lycoming R-680-E1
Engine limits	Maximum, except take-off
	-- in.Hg., 2200 rpm (275 hp)
	Take-off (one minute)
	-- in.Hg., 2300 rpm (290 hp)
Fuel capacity	100 gallons (two tanks at 38 gallons each in wings
	(+34) and one tank at 24 gallons in wing L.E. (+17))
Oil capacity	6-1/2 gallons (-34)
Maximum weight	4000 lbs.
C.G. limits	5800 series (+16.3) and (+27.7)
	5900 series (+16.3) and (+26.7)

### VI - MODEL SR-10H, DESIGNATION 5 PCL-SM

(Same as Model SR-10B except engine installation)

Engine	Lycoming R-680-E2
Engine limits	Maximum, except take-off
	-- in.Hg., 2200 rpm (265 hp)
	Take-off (one minute)
	-- in.Hg., 2300 rpm (280 hp)
Fuel capacity	76 gallons (two 38 gallon tanks in wings) (+34)
Oil capacity	5 gallons (-34)
Maximum weight	Landplane 3900 lbs.
	Seaplane 4210 lbs.
C.G. limits	Landplane:
	5800 series (+16.3) and (+27.7)
	5900 series (+16.3) and (+26.7)
	Seaplane:
	5800 series (+17.0) and (+27.6)
	5900 series (+17.0) and (+26.6)

### VII - MODEL SR-10J or SR-10J3, DESIGNATION 5 PCLM

(Same as Model SR-10B except engine installation and standard weight, 8.50-10  
6-fly tires, item 323, required equipment)

Engine	Lycoming R-680-E3 (See item 324)
Engine limits	Maximum, except take-off -- in.Hg., 2200 rpm (285 hp) Take-off (one minute) -- in.Hg., 2300 rpm (300 hp)
Fuel capacity	76 gallons (two 38 gallon tanks in wings) (+34)
Oil capacity	5 gallons (-34)
Maximum weight	4000 lbs.
C.G. limits	5800 series (+16.3) and (+27.7) 5900 series (+13.3) and (+26.7)